## ABSTRACT OF THE DISCLOSURE

The invention concerns a device and method for positioning and controlling railway vehicles. The device comprises fixed stations (1) including first means for transmitting/receiving (2) signals and a central control station (3) to which the fixed stations (1) are connected. The invention is characterized in that each railway vehicle comprises second means for transmitting/receiving (6) signals. The signals transmitted by said first and second transmitting/receiving means (2, 6) including an identifier specific to the transmitter and at least one message and consist in non-sinusoidal radio signals with very large bandwidth whereof the spectrum ranges between 1 and 10 GHz. Each railway vehicle (4) and each fixed station include processing means (8) for determining the identifier and the at least one message of each received signal. The central control station (3) sends command control instructions.